

Claims

- 1 (Currently Amended) A method for updating microcode in an automated data storage library, comprising the steps of:
 - assigning a first LUN to a first device, wherein said first device is an Input/Output (I/O) device of said automated data storage library;
 - assigning a second LUN to a memory, wherein said memory is memory of said I/O device;
 - wherein said first LUN and said second LUN are separate, and wherein said first LUN processes I/O commands, and said second LUN processes microcode update commands;
 - said first device receiving one or more commands;
 - said first device obtaining a LUN address from each of said one or more commands; ~~and~~
 - in response to said LUN address obtained from each of said one or more commands being equal to said first LUN, processing each of said one or more commands as input/output commands of said first device; and
 - in response to said LUN address obtained from each of said one or more commands being equal to said second LUN, said first device:
 - receiving a prepare for microcode update command, and placing said first device in an operational state to receive said update of said microcode;
 - storing said microcode in said memory using said LUN address assigned to said second LUN ~~updating said microcode in said memory using said LUN address assigned to said second LUN~~ by processing each of said one or more commands, and in response, updating said stored microcode in said first device; and
 - receiving at least one of a verification command and an operational test command to verify that said microcode has been updated.

- 2 (Cancelled) The method of claim 1, further comprising:
in response to said LUN address obtained from each of said one or more commands being equal to said first LUN, processing each of said one or more commands as input/output commands of said first device.
- 3 (Cancelled) The method of claim 1, further comprising:
in response to said first device receiving a prepare for microcode update command, placing said first device in a operational state to receive said update of said microcode.
- 4 (Currently Amended) The method of claim 13, wherein said placing said first device ~~is in an~~ operational state to receive said update of said microcode further comprises:
not accepting any new commands for processing;
completing all current commands; and
placing movable components at a rest position.
- 5 (Currently Amended) The method of claim 1, wherein said processing each of said one or more commands to update said microcode further comprises:
overwriting ~~said a~~ memory associated with said first device with an updated microcode.
- 6 (Currently Amended) ~~An automated data storage library system~~ for updating microcode, comprising:
a first device addressable by a first LUN, wherein said first device is an Input/Output (I/O) device of said automated data storage library;~~and~~
a memory addressable by a second LUN, wherein said memory is memory of said I/O device;[[,]]
wherein said first LUN and said second LUN are separate, and said first LUN processes I/O commands, and said second LUN processes microcode update commands and wherein said first device receives one or more commands, obtains a LUN address from each of said one or more commands;~~and~~
in response to said LUN address obtained from each of said one or more commands being equal to said first LUN, said first device processes each of said one or commands as input/output commands of said first device; and

in response to said LUN address obtained from each of said one or more commands being equal to said second LUN, said first device:

receives a prepare for microcode update command, and places said first device in an operational state to receive said update of said microcode;

stores said microcode in said memory using said LUN address assigned to said second LUN ~~updating said microcode in said memory using said LUN address assigned to said second LUN~~ by processing each of said one or more commands, and in response, updates said stored microcode in said first device; and

receives at least one of a verification command and an operational test command to verify that said microcode has been updated.

- 7 (Original) The system of claim 6, further comprising:
 - a host, wherein said host sends microcode update commands to said first device.
- 8 (Original) The system of claim 6, further comprising:
 - a host; and
 - a device interface coupled to said host, wherein said device interface receives commands from said host and transfers said commands to LUN addressable components.
- 9 (Original) The system of claim 6, wherein said memory is an Electrically Erasable Programmable Read Only Memory.
- 10 (Original) The system of claim 6, wherein said memory is coupled to said first device.
- 11 (Original) The system of claim 6, further comprising
 - an accessor, wherein said memory is coupled to said accessor.
- 12 (Original) The system of claim 6, further comprising:
 - a second device removably attached to said first device, wherein said memory is coupled to said second device.
- 13 (Original) The system of claim 6, further comprising:
 - a controller for operating said first device, wherein said memory is coupled to said controller.

14 (Cancelled) The system of claim 6, wherein said system is an automated data storage library.

15 (Currently Amended) An article of manufacture comprising a computer readable medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform method steps for updating microcode of a first device of an automated data storage library assigned to a first LUN, said first device coupled to a memory assigned to a second LUN, ~~wherein said first LUN and said second LUN are separate~~, said method comprising the steps of:

said first device receiving one or more commands, wherein said first device is an Input/Output (I/O) device, said memory is memory of said I/O device, said first LUN and second LUN are separate, and wherein said first LUN processes I/O commands, and said second LUN processes microcode update commands;

said first device obtaining a LUN address from each of said one or more commands; ~~and~~

in response to said LUN address obtained from each of said one or more commands being equal to said first LUN, processing each of said one or commands as input/output commands of said first device; and

in response to said LUN address obtained from each of said one or more commands being equal to said second LUN, said first device:

receiving a prepare for microcode update command, and placing said first device in an operational state to receive said update of said microcode;

storing said microcode in said memory using said LUN address assigned to said second LUN ~~updating said microcode in said memory using said LUN address assigned to said second LUN~~ by processing each of said one or more commands, and in response, updating said stored microcode in said first device; and

receiving at least one of a verification command and an operational test command to verify that said microcode has been updated.

16 (Cancelled) The article of manufacture of claim 15, wherein said method further comprises:

in response to said LUN address obtained from each of said one or more commands being equal to said first LUN, processing each of said one or more commands as input/output commands of said first device.

17 (Cancelled) The article of manufacture of claim 15, wherein said method further comprises:

in response to said first device receiving a prepare for microcode update command, placing said first device in a operational state to receive said update of said microcode.

18 (Currently Amended) The article of manufacture of claim 15~~17~~, ~~wherein said~~ wherein said placing said first device ~~is~~in an operational state to receive said update of said microcode further comprises:

not accepting any new commands for processing;
completing all current commands; and
placing movable components at a rest position.

REMARKS

Claims 1-18 stand rejected.

Claims 1, 4, 5, 6, 15, and 18 are currently amended.

Claims 2, 3, 14, 16, and 17 are cancelled herewith.

Claims 1, 4-13, 15 and 18 are now pending.

Support for the amendments to claims 1, 6, and 15 may be found in the specification, for example in paragraphs [0038], [0039], [0046], and [0047].